What is claimed is:

1. A fluid dynamic bearing system comprising:

a stationary sleeve;

a rotating shaft axially disposed through the sleeve;

a journal gap between the shaft and the sleeve, said gap defined by first and second interfacial surfaces of the shaft and sleeve;

at least one set of fluid dynamic grooves formed on the first interfacial surface of the journal gap; and

at least one step defined on the second interfacial surface of the journal gap.

2. The fluid dynamic bearing system according to claim 1, wherein the step is defined across from at last an axial portion of the set of grooves.

3. The fluid dynamic bearing system according to claim 2, wherein the fluid dynamic grooves are asymmetric to establish pumping pressure toward the base of the shaft.

4. The fluid dynamic bearing system according to claim 2, wherein the at least one step comprises a circumferential raised surface on the second interfacial surface.

5. The fluid dynamic bearing system according to claim 4, wherein the at least one step is opposite and offset axially from the at least one set of fluid dynamic grooves.

6. The fluid dynamic bearing system according to claim 5, wherein the first interfacial surface of the gap comprises an outer diameter of the shaft, and the second interfacial surface comprises an inner diameter of the sleeve.

7. The fluid dynamic bearing motor according to claim 1, wherein the outer diameter of the shaft further comprises two sets of fluid dynamic grooves and the inner diameter of the sleeve further comprises one step located across from one of the two sets of grooves.

8. The fluid dynamic bearing motor according to claim 6, wherein the outer diameter of the shaft further comprises two sets of fluid dynamic grooves and the inner diameter of the sleeve further comprises two steps, each of the steps being defined, at least in part, across from one of the sets of grooves.

9. The fluid dynamic bearing motor according to claim 2, wherein the first interfacial surface of the gap comprises an inner diameter of the sleeve and the second interfacial surface comprises an outer diameter of the shaft.

10. The fluid dynamic bearing motor according to claim 9, wherein the inner diameter of the sleeve further comprises two sets of fluid dynamic grooves and the outer diameter of the shaft further comprises the one step.

11. The fluid dynamic bearing motor according to claim 9, wherein the inner diameter of the sleeve further comprises two sets of fluid dynamic grooves and the outer surface of the shaft further comprises the one step.

12. A fluid dynamic bearing motor comprising:

a stationary sleeve;

a shaft and hub rotatable in relation to the sleeve;

a journal defined between the sleeve and the shaft;

a fluid bearing means between the sleeve and the shaft; and

a pressure regulating means cooperating with the bearing means to maintain proper axial alignment of the shaft and hub with the sleeve.

13. The fluid dynamic bearing motor according to claim 12, wherein the fluid bearing means comprises:

at least one set of fluid dynamic grooves formed on a first surface defining the journal; and

a fluid in the journal.

14. The fluid dynamic bearing motor according to claim 13, wherein the regulating means comprises at least one step formed on a second surface defining the journal and is disposed at least in part across the journal from the at least one set of fluid dynamic grooves.

15. A fluid dynamic bearing as claimed in claim 13 wherein the fluid bearing means includes two sets of grooves on the first surface of the journal, and the pressure regulating means comprises step defined on a second surface of the journal at least partly across from each of the sets of grooves.

16. A fluid dynamic bearing as claimed in claim 15 wherein at least one of the two sets of grooves is asymmetric to establish a pressure profile toward a base of the motor.

17. A method for countering fluctuating journal asymmetry pressure in a fluid dynamic bearing comprising:

(1) forming a journal between a first surface and a second surface, wherein the first and second surfaces face each other;

(2) forming at least one set of asymmetric fluid dynamic grooves on the first surface; and

(3) forming at least one step on the second surface, across the journal from the at least one set of asymmetric fluid dynamic grooves.

18. The method of claim 17, wherein step 3 comprises adding material to the second surface by at least one of the following methods: plating, coating, sputtering.

19. The method of claim 18, wherein material is added by sputtering a Diamond Like Coating upon the second surface.

20. The method of claim 17, wherein step 3 comprises removing material to define the step from the second surface by at least one of the following methods: turning, grinding, electrochemical machining, electrical discharge machining.